

Preliminary results from an EM induction study in the Pacific using submarine cable electric field data

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In this study, to obtain the conductivity structure in the Pacific, we used the electric potential data by using submarine cables retired from telecommunications services in addition to the magnetic field data.

The process of the data analysis is as follows.

1. GDS by the magnetic data leads to obtain conductivity structures beneath each observatory.
2. From these structures, we obtain a simple conductivity structure beneath the Pacific.
3. 3D conductivity structure is obtained to fit the electric potential data from submarine cables.

In this presentation, 3D forward modelling is going to be carried out with a semi-global model and the result of calculations and the EM data are compared and discussed.